



OASIS

New from Pinelog, the 'Oasis' is not only beautiful to look at but is also wonderfully kind to the environment.

Here are some of its features:-

### **Black Mountain Sheep Wool Insulation**



The Sheep Wool Insulation used in this lodge uses 100% virgin wool which is sourced from UK and Ireland.

Wool insulation is not only breathable but also able to absorb, retain and release moisture without affecting its thermal properties or performance. It is treated with boron salts to make it vermin and insect resistance for its lifetime.

It is the safest insulation material on the market today. By its nature it doesn't harbour dangerous chemicals, dust or mould that can lead to allergic or other reactions and, unlike almost all alternatives, wool is also non-flammable.

Manufacturing this insulation material requires 90% less energy than mineral wool insulation and so the carbon dioxide generated in its production is very low. Better still, wool actually locks up 6kgs of carbon dioxide per m<sup>2</sup> of insulation. By contrast, manmade insulation generates sizable amounts of carbon dioxide in its manufacturing processes, raising the level of greenhouse gases in the atmosphere.

## Timber Frame Construction

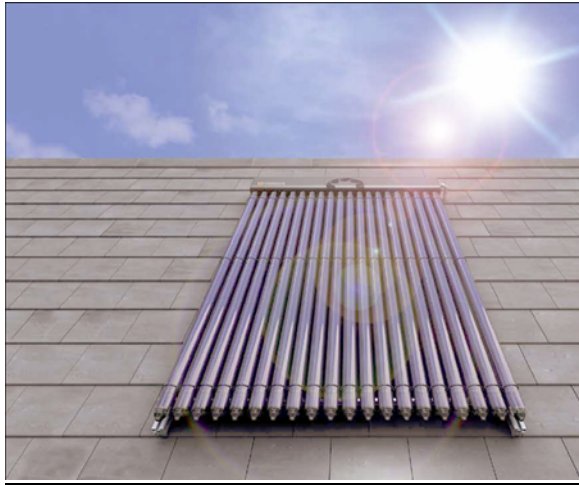
Our structural framework uses quality stress graded timber from managed forests. All the timber we use is PEFC rated – (Programme for the Endorsement of Forest Certification) which means you can be assured that our timber comes from sustainably managed forests.

Timber uses at least 20% less energy than other construction materials to bring it to the finished state. Unlike masonry construction the insulation in a timber frame home is contained inside the inner leaf ensuring that no heat is lost in the blockwork. Timber frame homes are easy to heat, cosy to live in and can result in savings in heating costs of up to 50%.



For every cubic metre of wood that is used instead of other building materials, 0.8 tonne of CO<sub>2</sub> is saved from the atmosphere and, consequently, every timber frame home saves around 4 tonnes of CO<sub>2</sub>, the amount which is produced by driving around 14,000 miles

## Kingspan Solar Thermal System



The most cost-effective, affordable renewable energy technology currently available for domestic and commercial applications is solar water heating and the Oasis lodge is fitted with a Kingspan system.

During the summer months as much as 100% of the energy needed to heat water could be provided by solar. On average throughout the year up to 70% of a dwelling's hot water requirement can be provided by solar power. The balance is provided by traditional means - a second electric immersion coil within the cylinder.

Solar water heating has low environmental impact: it can reduce carbon dioxide emissions by 400kg per year (depending on the fuel replaced). It can also reduce hot water heating costs by up to 60% annually.

## **Air Tightness**

Under current building regulations any new structure has to be tested for air tightness to ensure that expensive heated air is not escaping. Pinelodges have been independently tested at three times better than the building regulations pass rate.

## **Waney Edge Larch**



The Oasis lodge is externally clad with waney edge British larch. This is a very strong, hard-wearing wood and is an excellent insulator. When tested, it has proved to be up to 50% harder than common pine. The most beneficial characteristic of British larch is its natural durability, which results from its extremely high resin content.

## **Woodburning Stove**

Heating in the open plan living area of the Oasis lodge is provided by a wood burning stove. Burning wood is one of the most environmentally friendly ways of heating because timber is a carbon neutral fuel. This means it absorbs as much carbon during growth as it releases when burnt.

Heating with wood is not only environmentally friendly, but can also make good economic sense. Timber for fuel is typically up to 30% cheaper than oil or gas and with recent price rises in both; the savings are only likely to increase. An additional environmental benefit is that timber is usually sourced locally, so transport miles and associated emissions are also kept to a minimum.

## Cedar Shingles



The roof of the Oasis lodge is finished with Cedar Shingle roof tiles.

Timber roofing and siding has the highest insulation value of any of the timber substitutes.

The cellular structure of Red Cedar retards the passage of heat and cold and each cell acting as an insulating agent

## Key Fob controlled, Low energy lighting

Lighting accounts for close to 20 percent of the average home's electric usage. We have fitted with low energy lighting throughout which uses up to 75 percent less energy compared to standard incandescent light bulbs.

The lighting in the lodge is also controlled by a key fob, ensuring that all internal lights are switched off when the lodge is un-occupied.



## **Bamboo Worktop**

The worktops in the Oasis lodge are made from Bamboo! Unlike common types of trees, Bamboo is a rapid growing plant (second fastest growing plant in the world) which can grow back to full size and become suitable for harvesting again within 3-5 years, unlike 15-25 years for most trees. This growth rate makes bamboo worktop an environmentally responsible choice.

In order to grow, Bamboo plants require very little resources in terms of water and do not require fertilizers or pesticides for a successful crop. Its low maintenance attributes means it can naturally grow in rural areas as well as in renewable project areas.



Bamboo is also known to release a significant amount of oxygen into the atmosphere (more than trees). In doing so they contribute to lowering the amount of carbon dioxide in the air.

In addition to requiring very few resources to grow, Bamboo is also known to flourish in hard conditions drought-like areas thereby providing support to other animals and plants.

## **Water saving measures**



Water is a valuable resource and the Oasis is fitted with an award winning Alcona flushwise WC. This flushes with just 4 litres (for the full flush) and a miserly 2.6 litres (for the short flush)

This represents an "effective" 3 litres per flush in an "average" UK household compared to a normal average of 9 litres per flush.

Taps use around 20% of the total water used in the home. Our basin taps incorporate a clever eco-click device to limit the water flow and help save up to 72% of tap water usage.

The Minilite Eco shower we fit helps save water and conserve valuable resources – it uses only half the water of a typical 12 lpm mixer shower.

## 'A' rated appliances

Domestic Appliances are rated from A to G with 'A' appliances being the most efficient and 'G' the least. 'A' rated appliances can use up to half the electricity of a 'G' rated model, so all the appliances we use are 'A' rated.

